Data Challenge Goethe University Frankfurt
Mobility options in smart cities - Technical Briefing
**Agenda**

1. What rules the system
2. Networked mobility and possible business models
3. The modular box and our Data and API structures
4. Is a brokerage platform to create a mobility service market reachable
5. Mobility meets logistics
6. Leverage the attractiveness of railway stations
7. Are further possibilities in sight
What will rule the system

- Dominant vision: individual mobility
- Usage of the vehicle requires ownership
- Infrastructure normally provided by public authorities

Domain of the car industry

- Dominant vision: mass mobility
- Usage of vehicles centrally organized
- Infrastructure normally provided by public authorities

Domain of specialized transport organizations
Can networked mobility become a new competitor for the game?

- Dominant vision: shared and networked mobility
- Accessibility and Usage of the vehicle is the dominant rule
- Infrastructure normally provided by public authorities
  Vehicles can be offered legally also by private institutions
Networked mobility via modular orchestrated mobility offerings

Put the pieces together

https://developer.deutschebahn.com/store/apis/list
Our actual data and API-structures we can deliver
Networked mobility via brokerage of public and private offerings

Offer a market-place that brings demand and supply together

Brokerage Platform

Easy handling and usage to enable the exchange of provider and consumer
Possible data for a brokerage platform

Marketplace of mobility data (MDM)
objective individual traffic | http://www.mdm-portal.de/

- The marketplace brings together **supplier, user and refiner** of mobility data
- **Open, Shared und Closed Data**
- **National access point** of street traffic data (IVS) and data hub

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<th>Advantages for data supplier</th>
<th>for data consumer</th>
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<td>Easy research</td>
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...for data refiner
- Standardized format and transparent data quality
- Simple realization of data refinement processes
- New market chances
City Logistics: Smart Locker & Cargo Bikes

In logistics open, multi-vendor infrastructures are needed to bundle traffic more strongly. Smart lockers and transport solutions, such as cargo bike delivery, offer the greatest potential here.

Logistics demand for private sector can be estimated

- by using sociodemographic data → high parcel demand is e.g. related to people ... being young or ... being at work or ... living in a single household
- Data can be accessed through different regional open data platforms (Hamburg, Düsseldorf,...)
- To address infrastructure specifications use DB Open Data or other sources (OSM,...)
Leverage the attractiveness of railway stations

**Railway stations: Third Places Building Kit & Coworking Spaces**

Railway stations act as physical hubs for mobility and logistics. We also want to develop stations into attractions. As a neighborhood center and hub of city interaction and recreation, stations enhance the quality of life and create new business opportunities (e.g. coworking spaces).
Are further business models for networked mobility possible?

Any further ideas are welcome.
Many Thanks for your attention